CLAIM AMENDMENTS

1. (Canceled)

2. (Currently Amended) A method for decreasing cyclin-dependent kinase activity in a plant, the method comprising ~~the steps of~~:

~~(i)~~ (a) introducing into a plant cell a nucleic acid molecule encoding a plant cyclin-dependent kinase inhibitor (CKI) which binds ~~CDC2a~~ [[,]] a plant cyclin-dependent kinase having a PSTAIRE cyclin-binding motif, wherein the nucleic acid molecule encoding the plant CKI is under the control of a ~~regulatory sequence~~ promoter which ~~controls expression of the cyclin-dependent kinase inhibitor~~ functions in a plant cell, and wherein the CKI comprises an amino acid sequence of at least one of SEQ ID NO: 34, SEQ ID NO:35, or SEQ ID NO:36 or any of the aforementioned amino acid sequences having one mismatch at any position; and

~~(ii) expressing the said nucleic acid molecule; and~~

~~(iii)~~ (b) regenerating a plant ~~therefrom~~ from the plant cell, ~~which~~ wherein the regenerated plant has decreased cyclin dependent kinase activity relative to a corresponding wild type plant.

3. (Canceled)

4. (Canceled)

5. (Currently Amended) A method for increasing in a plant cell, the level of cyclin-dependent kinase inhibitor (CKI) which binds ~~CDC2a~~[[,]] a plant cyclin-dependent kinase, ~~in a plant cell relative to corresponding cells of a wild type plant, said~~ the method comprising ~~the steps of~~:

~~(i)~~ (a) introducing into a plant cell a nucleic acid molecule encoding a ~~cyclin-dependent kinase inhibitor~~ plant (CKI) which binds a plant cyclin-dependent kinase having a

PSTAIRE cyclin-binding motif, wherein the nucleic acid molecule encoding the plant CKI is under the control of a promoter which functions in ~~plants~~ a plant cell, and wherein the CKI comprises an amino acid sequence of at least one of SEQ ID NO:34, SEQ ID NO:35 or SEQ ID NO:36 or any of the aforementioned amino acid sequences having one mismatch at any position; and

~~(ii)~~ (b) expressing ~~said~~ the nucleic acid molecule in ~~said~~ the plant cell, thereby increasing the level of ~~cyclin-dependent kinase inhibitor~~ CKI in ~~plants~~ the plant cell relative to a corresponding cell of a wild type plant ~~in said plant cell~~.

6. (Canceled)

7. (Currently Amended) A method for increasing plant cell size, ~~said~~ the method comprising ~~the steps of~~:

~~(i)~~ (a) introducing into a plant cell a nucleic acid molecule encoding a plant cyclin-dependent kinase inhibitor (CKI) which binds [[CDC2a,]] a plant cyclin-dependent kinase having a PSTAIRE cyclin-binding motif, wherein the nucleic acid molecule encoding the plant CKI is under the control of a promoter which functions in ~~plants~~ a plant cell, and wherein the CKI comprises an amino acid sequence of at least one of SEQ ID NO:34, SEQ ID NO:35 or SEQ ID NO:36 or any of the aforementioned amino acid sequences having one mismatch at any position; and

~~(ii)~~ (b) expressing ~~said~~ the nucleic acid molecule in ~~said~~ the plant cell, thereby increasing plant cell size relative to a corresponding wild type plant.

8. (Currently Amended) The method of claim 7 wherein the plant ~~cells are cells in the~~ cell is a floral petal cell.

9. (Currently Amended) The method of claim 7 wherein the plant ~~cells are cells in the~~ cell is a leaf cell.

10. (Currently Amended) The method of claim 7 wherein the plant ~~cells are cells in the~~ cell is a stem cell.

11. (Currently Amended) A method for decreasing cell number in a plant, the method comprising ~~the steps of~~:

~~(i)~~ (a) introducing into a plant cell a nucleic acid molecule encoding a cyclin-dependent kinase inhibitor (CKI) which binds ~~CDC2a~~ [[,]] a plant cyclin-dependent kinase having a PSTAIRE cyclin-binding motif, wherein the nucleic acid molecule encoding the plant CKI is under the control of a promoter which functions in ~~plants~~ a plant cell and wherein the CKI comprises an amino acid sequence of at least one of SEQ ID NO:34, SEQ ID NO:35 or SEQ ID NO:36 or any of the aforementioned amino acid sequences having one mismatch at any position; and

~~(ii) expressing said the nucleic acid molecule in said the plant cell; and~~

~~(iii)~~ (b) regenerating a plant from ~~said~~ the plant cell, wherein ~~said~~ the regenerated plant has decreased cell number relative to a corresponding wild type plant.

12. (Canceled)

13. (Canceled)

14. (Currently Amended) A method of increasing leaf serration in a plant the method comprising ~~the steps of~~:

~~(i)~~ (a) introducing into a plant cell a nucleic acid molecule encoding a plant

cyclin-dependent kinase inhibitor (CKI) which binds ~~CDC2a~~[[,]] a plant cyclin-dependent kinase having a PSTAIRE cyclin-binding motif, wherein the nucleic acid molecule encoding the plant CKI is under the control of a promoter which functions in ~~plants~~ a plant cell and wherein the CKI comprises an amino acid sequence of at least one of SEQ ID NO:34, SEQ ID NO:35 or SEQ ID NO:36 or any of the aforementioned amino acid sequences having one mismatch at any position; and

~~(ii) expressing said nucleic acid molecule in said plant cell; and~~

~~(iii)~~ (b) regenerating a plant from ~~said~~ the plant cell, ~~said~~ wherein the regenerated plant ~~having~~ has increased leaf serration relative to a corresponding wild-type plant.

15. (Canceled)

16. (Canceled)

17. (Currently Amended) A method of increasing stomata size ~~of~~ in a plant, the method comprising ~~the steps of~~:

~~(i)~~ (a) introducing into a plant cell a nucleic acid molecule encoding a plant cyclin-dependent kinase inhibitor (CKI) which binds ~~CDC2a~~ [[,]] a plant cyclin-dependent kinase having a PSTAIRE cyclin-binding motif, wherein the nucleic acid molecule encoding the plant CKI is under the control of a promoter which functions in ~~plants~~ a plant cell and wherein the CKI comprises an amino acid sequence of at least one of SEQ ID NO:34, SEQ ID NO:35 or SEQ ID NO:36 or any of the aforementioned amino acid sequences having one mismatch at any position; and

~~(ii) expressing said nucleic acid molecule in said plant cell; and~~

~~(iii)~~ (b) regenerating a plant from ~~said~~ the plant cell, ~~said~~ wherein the regenerated plant ~~having~~ has increased stomata size relative to a corresponding wild type ~~plants~~ plant.

18. (Canceled)

19. (Canceled)

20. (Canceled)

21. (Currently Amended) A method of reducing petal size in a plant, said method comprising ~~the steps of~~:

~~(i)~~ (a) introducing into a plant cell a nucleic acid molecule encoding a plant cyclin-dependent kinase inhibitor (CKI) which binds [[CDC2a]] a plant cyclin dependent kinase having a PSTAIRE cyclin-binding motif, wherein the nucleic acid molecule encoding the plant CKI is under the control of a promoter which functions in ~~plants~~ a plant cell and wherein the CKI comprises an amino acid sequence of at least one of SEQ ID NO:34, SEQ ID NO:35 or SEQ ID NO:36 or any of the aforementioned amino acid sequences having one mismatch at any position; and

~~(ii) expressing said nucleic acid molecule in the plant cell; and~~

~~(iii)~~ (b) regenerating a plant from ~~said~~ the plant cell, wherein ~~said~~ the regenerated plant has flowers with reduced petal size relative to a corresponding wild type plant.

22. (Canceled)

23. (Canceled)

24. (Currently Amended) The method of claim ~~19~~ 21 wherein the promoter which functions in ~~plants~~ a plant cell is a petal-specific promoter.

25. (Currently Amended) A method of reducing leaf venation in a plant, said method comprising ~~the steps of~~:

~~(i)~~ (a) introducing into a plant cell a nucleic acid molecule encoding a plant cyclin-dependent kinase inhibitor (CKI) which binds [[CDC2a[[,]] a plant cyclin-dependent kinase having a PSTAIRE cyclin-binding motif, wherein the nucleic acid molecule encoding the plant CKI is under the control of a promoter which functions in ~~plants~~ a plant cell and wherein the CKI comprises an amino acid sequence of at least one of SEQ ID NO:34, SEQ ID NO:35, or SEQ ID NO:36 or any of the aforementioned amino acid sequences having one mismatch at any position; and

~~(ii) expressing said the nucleic acid molecule in the plant cell; and~~

~~(iii)~~ (b) regenerating a plant from ~~said~~ the plant cell, wherein ~~said~~ the regenerated plant has leaves with reduced leaf venation relative to a corresponding wild type plant.

26. (Canceled)

27. (Currently Amended) A method of decreasing endoreduplication and ploidy level in a plant cell, the method comprising ~~the steps of~~:

~~(i)~~ (a) introducing into a plant cell a nucleic acid molecule encoding a plant cyclin-dependent kinase inhibitor (CKI) which binds ~~CDC2a~~[[,]] a plant cyclin-dependent kinase having a PSTAIRE cyclin-binding motif, wherein the nucleic acid molecule encoding the plant CKI is under the control of a promoter which functions in ~~plants~~ a plant cell and wherein the CKI comprises an amino acid sequence of at least one of SEQ ID NO:34, SEQ ID NO:35, or SEQ ID NO:36 or any of the aforementioned amino acid sequences having one mismatch at any position; and

~~(ii)~~ (b) expressing ~~said~~ the nucleic acid molecule in the plant cell, thereby decreasing endoreduplication and ploidy level in the plant cell relative to a corresponding cell from a wild type plant.

28. (Canceled)

29. (Canceled)

30. (Currently Amended) A method of reducing plant seed size, the method comprising ~~the steps of~~:

~~(i)~~ (a) introducing into a plant cell a nucleic acid molecule encoding a plant cyclin-dependent kinase inhibitor (CKI) which binds ~~CDC2a~~[[,]] a plant cyclin-dependent kinase having a PSTAIRE cyclin-binding motif, wherein the nucleic acid molecule encoding the plant CKI is under the control of a promoter which functions in ~~plants~~ a plant cell and wherein the CKI comprises an amino acid sequence of at least one of SEQ ID NO:34, SEQ ID NO:35, or SEQ ID NO:36 or any of the aforementioned amino acid sequences having one mismatch at any position; and

~~(ii) expressing said the nucleic acid molecule in the plant cell; and~~

~~(iii)~~ (b) regenerating a plant from ~~said~~ the plant cell, wherein ~~said~~ the regenerated plant has decreased seed size relative to a corresponding wild type ~~plants~~ plant.

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. (Canceled)

35. (Canceled)

36. (Currently Amended) A transgenic plant, a variety obtained therefrom ~~with essentially the same characteristics resulting from the transgene,~~ a plant part, or plant cell which comprises a ~~nucleotide sequence~~ nucleic acid molecule encoding a plant cyclin-dependent kinase inhibitor (CKI) which binds ~~CDC2a~~[[,]] a plant cyclin-dependent kinase having a PSTAIRE

cyclin-binding motif, wherein the nucleic acid molecule encoding the plant CKI is under the control of a promoter which functions in ~~plants~~ a plant cell and wherein the CKI comprises an amino acid sequence of at least one of SEQ ID NO:34, SEQ ID NO:35 or SEQ ID NO:36 or any of the aforementioned amino acid sequences having one mismatch at any position, wherein ~~said nucleotide sequence~~ the nucleic acid molecule encoding a plant CKI ~~cyclin-dependent kinase inhibitor~~ is heterologous to the genome of the transgenic plant, or is homologous but additional to the genome of the transgenic plant or has been introduced into the transgenic plant, plant part or plant cell by recombinant DNA means.

37. (Currently Amended) The transgenic plant of claim 36 having decreased cyclin-dependent kinase activity relative to a corresponding wild type plant.

38. (Currently Amended) The transgenic plant of claim 36 having an increased level of CKI relative to a corresponding wild type plant.

39. (Currently Amended) The transgenic plant of claim 36 having altered leaf ~~size~~ shape relative to a corresponding wild type plant.

40. (Currently Amended) The transgenic plant of claim 36 having leaves which are more highly serrated compared to a corresponding wild type ~~plants~~ plant.

41. (Currently Amended) The transgenic plant of claim 36 having leaves which are more deeply lobed than a corresponding wild type ~~plants~~ plant.

42. (Canceled)

43. (Currently Amended) The transgenic plant of claim 36 having flowers with reduced petal size relative to flowers of a corresponding wild type plant.

44. (Currently Amended) The transgenic plant of claim 36 having reduced leaf ~~veination~~ venation relative to leaves of a corresponding wild type plant.

45. (Currently Amended) The transgenic plant of claim 36 having cells with decreased ploidy levels relative to a corresponding wild type plant.

46. (Canceled)

47. (Currently Amended) The transgenic plant of claim 36 having reduced seed size relative to a corresponding wild type plant.

48. (Currently Amended) The transgenic plant of claim 36, wherein the total cell number of the plant is decreased relative to a corresponding wild type ~~plants~~ plant.

49. (Currently Amended) The transgenic plant of claim 36, wherein at least one of petals, leaves or stems comprise cells of increased size relative to a corresponding wild type ~~plants~~ plant.

50. (Currently Amended) The transgenic plant of claim 36, comprising leaves with increased stomata size relative to a corresponding wild type ~~plants~~ plant.

51. (Canceled)

52. (Currently Amended) The method of any one of claims 2, 5, 7[[,]]-11, 14, ~~15~~ [[,]] 17[[-19]], 21, 24, 25, 27, or 30 [[or 31]], wherein the CKI comprises the amino acid sequence as set forth in any one of SEQ ID NO: 2, SEQ ID NO:4, or SEQ ID NO:6.

53. (Currently Amended) The method of any one of claims 2, 5, 7-11, ~~13-25~~ [[,]] 14, 17, 21, 24, 25, 27, or 30, [[or 31,]] wherein the nucleic acid molecule comprises the nucleotide sequence as set forth in any one of SEQ ID NO:1, SEQ ID NO:3, or SEQ ID NO:5.

54. (Currently Amended) The method of any one of claims 2, 5, 7-11, ~~13-25~~ [[,]] 14, 17, 21, 24, 25, 27, or 30 ~~or 31~~ wherein the CKI further comprises the consensus amino acid sequence as set forth in any one of ~~SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36~~[[,]] SEQ ID NO:37, SEQ ID NO:38 or SEQ ID NO:39 or any of the aforementioned amino acid sequences having

one mismatch at any position.

55. (Currently Amended) The transgenic plant of claim 36 wherein the CKI further comprises the consensus amino acid sequence as set forth in any one of ~~SEQ ID NO:34, SEQ ID NO:35, SEQ ID NO:36~~[[,]] SEQ ID NO:37, SEQ ID NO:38 or SEQ ID NO:39 or any of the aforementioned amino acid sequences having one mismatch at any position.

56. (Currently Amended) Harvestable parts or propagation material from the transgenic plant of claim 36, comprising the nucleic acid molecule ~~CKI which binds CDC2a~~ that was introduced into the parent plant.

57. (Currently Amended) Cut flowers from the transgenic plant of claim 36, comprising the nucleic acid molecule ~~CKI which binds CDC2a~~ that was introduced into the parent plant.

58. (Canceled)

59. (Canceled)